These tangs are adapted to snap into the engagement notches 115 to hold the cover 13 in position over the handpiece 12. The cover can be attached by sliding axially over the handpiece 12. The cover 13 can include fittings for fluid engagement with the two pilot ports 40 and 61. Alternatively, the cover can be formed with openings for insertion of engagement tubing to mate with the respective pilot ports to provide hydraulic fluid to the rotary motor 20 and the reciprocating motor 22. In a specific embodiment, the cover 13 extends from the distal end 71 of the distal housing 70 to the proximal end 97 of the support housing 93. The cover can thus terminate short of the bayonet mounting feature between the support housing and the collection trap 55. Although not shown in the figures, the proximal end 97 of the support housing 93 can be configured to include a similar array of engagement notches with a corresponding array of mating tangs formed at the proximal end of the cover 13.

[097] Pressurized fluid along cylinder pressure line 161 is also fed to a pressure switch 165. The pressure switch has two positions providing new paths 165a and 165b. In addition, an adjustable return spring 166 biases this switch to its normal position at which fluid from the pressure source 152 terminates within the valve. However, when pressurized fluid is provided through cylinder pressure line 161, the pressure switch 165 moves to its flow path 165b in which the fluid source 152 is hydraulically connected to the pressure input line 168. This pressure input line 168 feeds an oscillating hydraulic valve 170. It is this valve that principally operates to oscillate the reciprocating motor 22 by alternately pressurizing and releasing the two-position hydraulic valve 158. The pressure switch 165 is calibrated to sense an increase in pressure within the cylinder pressure line 161 or in the reciprocating motor cylinder 60 that occurs when the piston 66 has reached the end of its stroke. More specifically, the piston reaches the end of its stroke when the inner cannula 17 contacts the cutting board 31. At this point, the hydraulic pressure behind the piston increases, which increase is sensed by the pressure valve 165 to stroke the valve to the flow path 165b.

[102] Thus far the portion of the hydraulic control system 150 that controls the operation of the reciprocating motor 22 has been described. The system 150 also controls the operation of the rotary motor 20. Again, the most preferred embodiment, the motor 20 is an air motor. This air motor is controlled by another hydraulic valve 182. As shown in FIG. 10, the initial position of the valve provides a flow path 182a in which the fluid source 152 is connected to blocked line 183. However, when the hydraulic valve 182 is pressurized, it moves to flow path 181b in which

the fluid source 152 is connected to the pilot port 40 of the air motor. In this position, pressurized fluid continuously drives the air motor 20, thereby rotating the inner cannula 17. It can be noted parenthetically that a muffler M can be provided on the air motor to reduce noise.

[127] Referring now to FIG. 13, it can be seen that the biopsy apparatus 300 includes a reciprocating motor assembly 330 and a rotary motor assembly 332. Each of these assemblies is constructed similar to the like assemblies described above. In the present embodiment, the reciprocating motor assembly 330 includes a housing 340 that is contained within the upper and lower housing 310, 311 that define the handpiece 305.

IN THE CLAIMS

Please cancel claims 4-9 without prejudice.

Please rewrite claim 1 as set forth below in clean form. Additionally, in accordance with 37 CFR 1.121(c)(1)(ii), amended claim 1 is set forth in a marked up version in the pages attached to this amendment.

1. (Once Amended) A tissue cutting device comprising:

an elongated handpiece defining an elongated channel on an outer surface of said handpiece;

a cannula hub mounted to said handpiece and having a fluid port;

a tube connected at one end to said fluid port and having an opposite end connectable to a fluid source, said tube disposed within said elongated channel and sized to be recessed within said channel relative to said outer surface;

an outer cannula supported at a proximal end by said cannula hub and defining a tissue-receiving opening adjacent a distal end thereof, and a lumen between said proximal and distal ends in fluid communication with said fluid port of said cannula hub; and

an inner cutting member slidably disposed within said lumen of said outer cannula and defining a cutting edge at a distal end thereof operable to sever tissue projecting through said